Columbia River Component Baseline Risk Assessment

Overview of Literature Search and Source Identification

Richard Palmer
Department of Civil and Environmental Engineering
University of Washington
Seattle, WA
Objective

• Conduct a thorough and comprehensive review of all available research, past and present concerning the environmental and ecological status of the Lower Columbia River.
  – Focus efforts on:
    • Hanford related contaminants
    • Specific Geographic Region
  – Compile information into Bechtel provided database
Locating Information and Data

• Searches of onsite libraries
  – University Library Systems, ERC, Fluor, DOE and PNNL

• Online library searches
  – CIC (Consolidated Information Center)
  – USGS, WDFW, WA-DOH, OR-DOE

• Retrospective searches
  – CRCIA (Columbia River Comprehensive Risk Assessment; 1972 to 1992)
  – HEDR (Hanford Environmental Dose Reconstruction (1944 to 1972)

• References and Personal Contact
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• References and Personal Contact
Need help with research? Have a question? ask us
e-mail | chat | phone

Services >>
- Your Library Account
- Connect from Off-Campus
- Course Reserves
- Interlibrary Loan
- Reserve a Study Room
- More Services...

Spotlight
- On Thursday, September 15 the Libraries will open at 10:00 am PDT, one hour later than usual.
- Wireless internet access is now available throughout Suzzallo and Allen Libraries. more ...
- The old proxy service has been turned off. More information is available here.
- In Internet Explorer, using the "Back" button in PubMed will sometimes generate an error. Find out more ...
1. *The lower Columbia River bi-state program 1991 reconnaissance survey*  
The bi-state lower Columbia River water quality program was formed in 1990 to assess overall water quality in the lower river below Bonneville Dam at the direction of the Oregon and Washington state legislatures.  
*View Record | Check for UW holdings*

2. *Studies of Columbia River water quality development of mathematical models for sediment and radionuclide transport analysis*  
...individual radionuclides in the freshwater region of the Columbia River below Priest Rapids Dam are being applied to the river reach between Priest Rapids and McNary dams in an initial sensitivity analysis, true two-dimensional finite ...  
*View Record | Check for UW holdings*

3. *Water Resources Service dissolved gas study: Compilation of field measurements*  
Clark, M.R., April 12 1976, 97 p, 95 tab.  
In 1972 the Water Resources Service initiated a continuing survey program to ascertain to what extent levels of gas supersaturation of sufficient magnitude to cause gas bubble disease in fish occur in provincial waters of British Columbia.  
*View Record | Check for UW holdings*
<table>
<thead>
<tr>
<th>Details</th>
<th>Title</th>
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<tbody>
<tr>
<td></td>
<td>Access EPA</td>
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<td></td>
<td>AIRS executive plus</td>
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<td></td>
<td>Summaries of air pollution data for the United States and fifty countries; includes sampling data, along with software to produce reports, charts, and maps</td>
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<tr>
<td></td>
<td>Aquatic sciences &amp; fisheries abstracts ASFA / - UW restricted</td>
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<tr>
<td></td>
<td>Covers all aspects of marine, brackish, and freshwater environments including biology; ecology; fisheries; aquaculture; oceanography; limnology; resources and commerce; pollution; biotechnology; marine technology and engineering</td>
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<td>Canary database</td>
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<td>The Canary database contains studies in the biomedical literature that explore the use of wildlife, domestic, and companion animals as &quot;sentinels&quot; for the effects of chemical, biological, and physical hazards in the environment that may be a risk to human health. The database allows users to locate and visualize patterns in sentinel studies according to: exposures; disease outcomes (animal); species (and types); study methodologies; authors; journals; locations. It can be browsed by year, by journal, or by methodology</td>
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<td></td>
<td>Digital atlas of the greater Yellowstone area /</td>
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<td>ECOTOX database system</td>
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<td>The ECOTOX database is a source for locating single chemical toxicity data for aquatic life, terrestrial plants and wildlife. ECOTOX integrates three U.S. EPA, Office of Research and Development (ORD), National Health and Environmental Effects Research Laboratory (NHEERL), Mid-Continent Ecology Division toxicology effects databases: AQUIRE (aquatic life), PHYTOTOX (terrestrial plants), and TERRETOX (terrestrial wildlife)</td>
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<td>EIM Environmental information management</td>
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<td></td>
<td>Search over 1.7 million environmental records on Washington's air, water, soil, aquatic animals, and plants from over 10,000 monitoring locations throughout and adjoining Washington state. Access data from over 400 studies including information about where samples were collected, study details, and data quality</td>
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<td>Envirofacts data warehouse and applications : a single point of access to select U.S. EPA environmental data</td>
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<td>Envirofacts allows you to retrieve environmental information from EPA databases on air, chemicals, facility information, grants/funding, hazardous waste, superfund, toxic releases, water permits, drinking water, drinking water contaminant occurrence, drinking water microbial and disinfection byproduct information. It also allows you to generate maps of environmental information by selecting from several Mapping Applications</td>
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<tr>
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<td>Environmental fate database</td>
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<td>Provides access to the following databases: DATALOG, which contains 18 types of environmental fate data; BIOLOG,</td>
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</tbody>
</table>
Welcome to STORET, EPA's largest computerized environmental data system.

STORET (short for STOrage and RETrieval) is a repository for water quality, biological, and physical data and is used by state environmental agencies, EPA and other federal agencies, universities, private citizens, and many others. Take a minute to browse around our site or click on the water drop to retrieve monitoring data.

Features
- Download Data
- Training
- SIM Software
- Fact Sheets
- National Monitoring Conference

About STORET | Data Owner's Corner | Updates and Downloads | Obtaining Water Quality Data | Useful Links | Commonly Asked Questions

Comments? If you have a question or comments on this website or on the STORET system, please call STORET User Assistance at 1-800-424-9007, or send us an email at STORET@epa.gov
Water-Quality Data for Washington

[Link to data reliability information]
for more water resources data for [Washington State]

Introduction
The USGS collects and analyzes chemical, physical, and biological properties of water, sediment and tissue samples from across the Nation. The NWISWeb discrete sample data base is a compilation of over 4.2 million historical water quality analyses in the USGS district data bases through September 2004. The discrete sample data is a large and complex set of data that has been collected by a variety of projects ranging from national programs to studies in small watersheds. Users should review the help notes and particularly the Data retrieval precautions before beginning any retrieval or analysis of data from this data set. Additions of more current data, modifications to ancillary information, and enhanced retrieval options to help users find and appropriately use the data they need are planned for a future release of NWISWeb.

As selected surface-water and ground-water sites, the USGS maintains instruments that continuously record physical and chemical characteristics of the water including pH, specific conductance, temperature, dissolved oxygen, and percent dissolved-oxygen saturation. Supporting data such as air temperature and barometric pressure are also available at some sites. At sites where this information is transmitted automatically, data are available from the real-time data system.

 实时数据
实时水质量数据直接来自现场仪器。瞬时数据在5分钟到1小时的间隔内被记录并上传到数据库。

样品
可获取现场和/或实验室分析的水样、生物指示物、沉积物和其它环境样本。

教程
教程解释如何执行水质量检索和理解结果。
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Agency Contact Results

- Contacts provided by public meeting, correspondence, and past studies
- Agencies Include: Tribes, EPA, BPA, FERC, WADOE, ORDEQ, USCDC, USACE, USGS, NRCS, other regulatory agencies, ports and municipalities
Example of Contact Sources

• USACE Portland District website
  – 75+ different organizations listed w/ contact information, all involved with Columbia

Partnerships/Stakeholders

The Corps is actively engaged in creating and developing partnerships with other federal, tribal, state and local stakeholders interested in the Lower Columbia River. These stakeholders include, but are not limited to, the groups listed below.

Disclaimer:

The appearance of hyperlinks does not constitute endorsement by the U.S. Army Corps of Engineers (USACE) of these web sites or the information, products, or services contained therein. USACE does not exercise any editorial control over the information you may find at these locations.

FEDERAL AGENCIES

- Bonneville Power Administration (BPA)
- Bureau of Indian Affairs (BIA)
Criteria for Identifying Bibliographic Sources

- Were data collected from or near Columbia River?
- Did the source contain analytical data or other information relevant to risk assessment?
  - e.g., radiological transfer rates; surveys of potential ecological receptor species
- Were the reported data summarized or were all the data presented?
- Was the document the original source or was it a review?
- Were QA/QC procedures included or referenced?
- If data were not in the report, where did it reside?
Are we certain we found it all?

• **In these matters the only certainty is that nothing is certain.**
  – **Pliny the Elder** (23 AD - 79 AD)

• **When one admits that nothing is certain one must, I think, also admit that some things are much more nearly certain than others.**
  – **Bertrand Russell** (1872 - 1970)
Are we certain we found it all?

- Current, important, and readily available data have been identified
  - Wide breadth of sources pursued
  - Multiple eyes searching
  - Diminishing number of relevant documents over time
  - Target items are those that can be used in risk analysis